

**DETAILED ACTION**

**ART REJECTION:**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,7-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kayanakis et al(6,497,371).

-- In considering claim 1, the claimed subject matter that is met by Kayanakis et al(Kayanaki) includes:

1) the thin film integrated circuit which can store information is met by the integrated circuit or /chip(22);

2) the antenna connected to the circuit is met by the antenna(24) which is connected to the chip(22);

3) the circuit and antenna being mounted inside the film-like article is met by the chip(22) and antenna(24) being mounted inside of paper layers(18 and 20).

-- Claim 7 recites subject matter that is met as discussed in claim 1 above, as well as:

1) the depression provided in the file like article is met by the hole in which the module(14) is located in, as seen in figure 2.

-- With regards to claims 8-12, the slits being provided n the opening is met by the diagonal slits as shown in opening area(14) as shown in figure 1.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-6, and 13-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kayanakis et al(Kayanakis).

-- Claim 2 recites subject matter that is met as discussed in claim 1 above, as well as:

2) the antenna being mounted on a surface of the article is met by the electronic module(14) including the antenna(24) being located in a through hole of the coatings(18,20). Since Kayanakis teaches the module being located in a through hole as seen in figure 2, it would have been obvious that the antenna or circuit would have been readily mounted on or inside the paper, as desired, since one of ordinary skill would have readily mounted the module based on the position of the module relative to the hole.

-- With regards to claims 3-4, although not specifically taught by Kayanakis, it would have been obvious to one of ordinary skill in the art at the time the invention was made to create any thickness as desired to, since thickness of the paper would have constituted a matter of obvious design choice.

-- Claims 5-6 recite subject matter that is met as discussed in claim 2 above.

-- With regards to claims 13-17, although not taught by Kayanakis, the examiner takes Official Notice that in the integrated circuit art, circuits that have light transmitting

characteristics is well known, and therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate circuits having light-transmitting characteristic, since this would have provided an optical aspect to the circuit that would have allowed a user to perceive proper operation of the circuit, by use of the light transmitting characteristic.

-- With regards to claims 18-22 and 28-32 it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate an insulating film containing nitrogen or hydrogen, since Kayanakis already desires to utilize laminated overlays onto the ticket body(see: column 4, lines 51-64), and therefore, use of nitrogen or hydrogen would have provided an adequate means for providing an overlay of the paper.

-- With regards to claims 23-27, it would have been obvious to one of ordinary skill in the art at the time the invention was made to design the paper of Kayanakis with any thickness as desired which would have enhanced desired usage of the paper.

-- With regards to claim 33, the examiner takes Official Notice that in the semiconductor film art, use of sources, drains, and channel regions is well known, and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate these means into the paper of Kayanakis, and as well to provide these means perpendicular to direction of bending of the film, since this would provided well known and efficient means for enhancing the operation of the circuitry of the film. Furthermore, orienting them in perpendicular direction would have been design choice that would have protected the circuitry during bending of the paper.

-- With regards to claims 34-38, although Kayanakis teaches use of a single integrated circuit and antenna, it would have been obvious to one of ordinary skill to implement plural circuits and/or antenna as desired into the paper of Kayanakis, since duplicating the implementation of circuits and antenna would have merely duplicated a concept that would have already been taught, and therefore would have constituted a matter of design choice.

-- With regards to claims 39-43, although Kayanakis teaches the film like article being a ticket, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the circuitry into a business card, or any paper type article, since the ticket strip of Kayanakis would have been readily converted into a business card as desired by one of ordinary skill, since a card and a ticket both consist of paper.

-- Claims 44-48 recite subject matter that is met by Kayanakis as already discussed in the claims above. Furthermore, upon forming the paper of Kayanakis, it would have been obvious that cutting, connecting, enfolding, and mounting steps would have been implemented in order to form the ticket of Kayanakis.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARYL POPE whose telephone number is (571)272-2959. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MIKE RAZAVI can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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